

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION



Bureau of Aviation
716 Trans. & Safety Bldg.
Harrisburg, PA 17120
717-783-2282

May 9, 1989

IN REPLY REFER TO

Mr. Robert L. Hoover, P.E.
11704 Seven Locks Road
Potomac, MD 20854

RE: Review type: FAA Form 7460-1
Aeronautical Study #: 89-AEA-0451-OE
Nearest Airport: Keller Bros. &
Millard

Dear Mr. Hoover:

The Pennsylvania Bureau of Aviation is in receipt of a copy of the Notice of Proposed Construction or Alteration submitted to the FAA dated February 24, 1989, in reference to the proposed Low Power TV Antennas east of the Millard Airport at 40° 19' 49" North Latitude and 76° 25' 37" West Longitude.

This Notice has been reviewed and it has been determined that the proposed structure will not exceed FAR Part 77 Airport Obstruction Standards and is in compliance with state law; therefore, we have no objection to the proposed construction.

Our review is not intended to preempt any local and federal laws, ordinances or restrictions that may require other action in regard to the proposed construction.

Sincerely,

A handwritten signature in cursive script, reading 'Charles H. Hostetter', is written over the typed name.

Charles H. Hostetter, A.A.E.
Director
Bureau of Aviation

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION



Bureau of Aviation
716 Trans. & Safety Bldg.
Harrisburg, PA 17120
717-783-2282

May 9, 1989

IN REPLY REFER TO

Mr. Robert L. Hoover, P.E.
11704 Seven Locks Road
Potomac, MD 20854

RE: Review type: FAA Form 7460-1
Aeronautical Study #: 89-AEA-0360-OE
Nearest Airport: Warner

Dear Mr. Hoover:

The Pennsylvania Bureau of Aviation is in receipt of a copy of the Notice of Proposed Construction or Alteration submitted to the FAA dated February 21, 1989, in reference to the proposed Low Power TV Antenna north of the Warner Airport at 39° 54' 42" North Latitude and 76° 37' 15" West Longitude.

This Notice has been reviewed and it has been determined that the proposed structure will not exceed FAR Part 77 Airport Obstruction Standards and is in compliance with state law; therefore, we have no objection to the proposed construction.

Our review is not intended to preempt any local and federal laws, ordinances or restrictions that may require other action in regard to the proposed construction.

Sincerely,

A handwritten signature in cursive script, reading "Charles H. Hostetter", is written over a horizontal line.

Charles H. Hostetter, A.A.E.
Director
Bureau of Aviation

DR. R. L. HOOVER, P.E.

R. L. HOOVER
CONSULTING TELECOMMUNICATIONS ENGINEER
11704 SEVEN LOCKS ROAD
POTOMAC, MARYLAND 20854
(301) 983-0054

R-6-15
RECEIVED

MAY 17 1989

May 15th, 1989

COHEN & BERFIELD

Mr. David Gardner
Raystay Company

Dear David:

As for Lancaster, we received a request for additional information on the Lebanon site Channel 38 operation from the Jamaica, Long Island FAA on the matter of possible spurious emission jamming to its nearby site. Attached are two copies of our reply.

And as for the Lancaster case, I don't think they have wised up that there is an application for Channel 55 also in Lebanon.

Sincerely,



Bob Hoover, PE

Copy w/ atchmnt to Mort Berfield, Esquire

- 90 -

DR. R. L. HOOVER, P.E.

R. L. HOOVER
CONSULTING TELECOMMUNICATIONS ENGINEER

11704 SEVEN LOCKS ROAD
POTOMAC, MARYLAND 20854

(301) 983-0054

R-6-15
RECEIVED

MAY 16 1989

COHEN & BERFIELD

May 15th, 1989

Mr. David Gardner
Raystay Company

Dear David:

We received a request for additional information on the Lancaster site Channel 23 operation from the Jamaica, Long Island FAA on the matter of possible spurious emission jamming to its nearby site. Attached are two copies of our reply.

I don't think they have wised up that there is an application for Channel 31 also in Lancaster.

Sincerely,



Bob Hoover, PE

Copy w/ atchmnt to Mort Berfield, Esquire ✓

R. L. HOOVER
CONSULTING TELECOMMUNICATIONS ENGINEER

11704 SEVEN LOCKS ROAD
POTOMAC, MARYLAND 20854
(301) 983-0054

May 15th, 1989

Federal Aviation Administration
Airway Facilities Division
Communications/Interference Section
Fitzgerald Building, AEA-433
John F. Kennedy International Airport
Jamaica, New York 11430

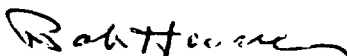
re: Study 89-AEA-0452-OE
Raystay Company LPTV Application in
Lancaster, Pennsylvania

The application before the FCC on behalf of the Raystay Company for a new Low Power Television Station on Channel 23 in Lancaster, Pennsylvania is being reviewed for its electromagnetic compatibility with a nearby FAA facility.

The applicant's proposed operation specifies approximately 21.6 dB of suppression by: 1) L_p , polarization loss of 16 dB because the applicant proposes horizontal (only) polarization from its antenna; 2) L_d , Antenna vertical directivity of approximately 5.2 dB (a -2 degree beam tilt is proposed), where the vertical radiation characteristic or vertical shape factor of the proposed antenna is herewith provided in the attached Figure 6 of the Application before the FCC; and EIRP, Effective Radiation would be reduced at the azimuthal angle subtended from the proposed LPTV station and the FAA site by approximately 0.42 dB. Our calculation shows this azimuthal angle to be approximately 14.9 degrees true, where the proposed LPTV directional antenna would be pointed at 286 degrees true, as shown in the attached Figures 4 and 5 of the Application.

The sum of these items results in approximately 21.6 dB spurious signal attenuation. Per the attached letter from the transmitter vendor, an additional 18 dB (a total of 78 dB) is provided below the video carrier frequency in the 225 to 400 MHz band and an additional 27 dB (a total of 87 dB) is provided in the 108 to 137 MHz band. Adding 21.6 dB from the proposed antenna parameters and an additional 18 dB from the transmitter specification results in 39.6 dB, which is in excess of the guideline indicated, 26 dB additional spurious radiation attenuation.

Sincerely,



Bob Hoover, PE

Atchmnts: Compatability Request, Fig's 4, 5 & 6 and vendor letter



U.S. Department
of Transportation
**Federal Aviation
Administration**

Eastern Region

Federal Building
John F. Kennedy
International Airport
Jamaica, New York 11430

MAY 9 1989

ELECTROMAGNETIC COMPATIBILITY REQUEST

David A. Gardner
c/o Bob Hoover, P.E.
11704 Seven Locks Road
Potomac, Maryland 20854

Re: Study No. 89-AEA-0452-OE

Dear Sirs:

Your Notice of Proposed Construction or Alteration (FAA form 7460-1) is being reviewed with respect to its electromagnetic compatibility with the surrounding FAA facilities by authority of the Federal Aviation Act of 1958, as amended, Sections 307(a) and 313(a).

Based on an agreement between the FAA and FCC in 1981, your transmitter must not exceed -4 dBm fundamental, and -104 dBm spurious signal level at our site.

Please provide any additional information which supports the compatibility of your transmitter with our criteria, by filling out the enclosed preaddressed form and returning it to this office. The signal levels shown on the attached work sheet were calculated using the frequency and power which you supplied.

Your prompt reply will allow us to expedite your proposal.

Sincerely,

Charles S. Shuler
Manager, Operations, Procedures and Airspace Branch

Enclosures

ELECTROMAGNETIC COMPATIBILITY REQUEST

David A. Gardner
c/o Bob Hoover, P.E.
11704 Seven Locks Road
Potomac, Maryland 20854

Re: Study No. 89-AEA-0452-OE

Please confirm or add the appropriate attenuation for your facility by checking the box(es) at left of item and validate with signature:

- ☐ My transmitter provides at least 86 dB of spurious emission attenuation (26 dB greater than the FCC required 60 dB) in the 108-137, 225-400 Mhz frequency bands.
Applicant's proposed transmitter would exceed 78 dB of spurious emission attenuation.

----- or -----

- ☐ My transmission system can provide the additional 26 dB of attenuation in the 108-137, 225-400 Mhz frequency bands as follows:
(e.g. polarization loss -16 dB, attenuator - 26 dB)

Type of Loss:

Atten:

Transmitter, per atch letter

18 dB

EIRP

0.42 dB

Lp, Horz Polarization

16 dB

Ld, Ant vert directivity

5.2

Total

39.6

Robert Lloyd Hoover
SIGNATURE OF AUTHORIZING OFFICIAL

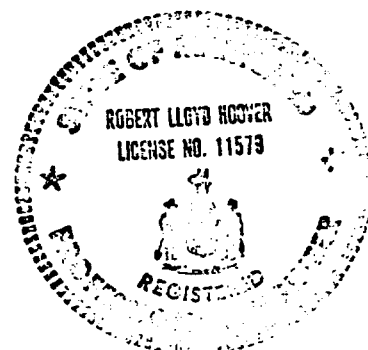
Robert Lloyd Hoover, PE

May 15th 89
DATE

May 15th, 89

TITLE

Registered Professional Engineer,
New Jersey #GE28700
Maryland #11579



AIRSPACE NUMBER: 89-AEA-0452-OE

LOCATION: LANCASTER, PA

DATE: 24-Apr-89

FAA SITE: RCAG

Lat N 40 7 29
Lon W 76 17 52

Protected frequency 121.7 MHz
Antenna height AMSL 433.0 ft

PROPONENT: GARDNR

Lat N 40 3 47
Lon W 76 19 9

Radiated Power 28.5 Kw
Frequency 525.3 MHz
Antenna height AMSL 527.0 ft

Slant Distance: Da = 23247.9 ft
Theta 0.2 deg

EIRP = Effective Radiated Power of the proponent.

EIRP = $10 \log (\text{power in Kw}) + 62.2$ 76.7 dBm

Lr = Receiver system on frequency losses.

Use 3 dB if actual value unknown. 3.0 dB

La = Typical ground/air antenna loss.

Select VHF or UHF graph from menu. 4.0 dB

Lp = Polarization loss between the victim and
broadcast antennas. If the broadcast
antenna is horizontally polarized, Lp = 16 dB,
for circular polarization, Lp = 0 dB.

0.0 dB

Ld = Antenna vertical directivity. This term
requires antenna pattern data from the
proponent. E = relative E-field at vertical
Theta from above. If unknown, enter E = 1.

$Ld = 10 \log (E)^2$ E = 1 0.0 dB

Sr = FCC spurious emission tolerance. Enter the
lesser: 80 dB for FM, 60 dB for TV, or
 $43 + 10 \log \text{ERP in watts} = 87.5$

60.0 dB

Lv = Free space transmission loss at the victim
receive frequency.

$Lv = 20 \log (\text{freq. in MHz} \times \text{Da in ft}) - 37$ 92.0 dB

Li = Free space transmission loss at the
frequency of the interfering station.

104.7 dB

IN-BAND RADIATION (must be less than -104 dBm)

$\text{EIRP} - Lv - Ld - Lp - Lr - Sr$ =====> -78.3 dBm

OUT-OF-BAND RADIATION (must be less than -4 dBm)

$\text{EIRP} - Li - Ld - Lp - Lr - La$ =====> -35.0 dBm

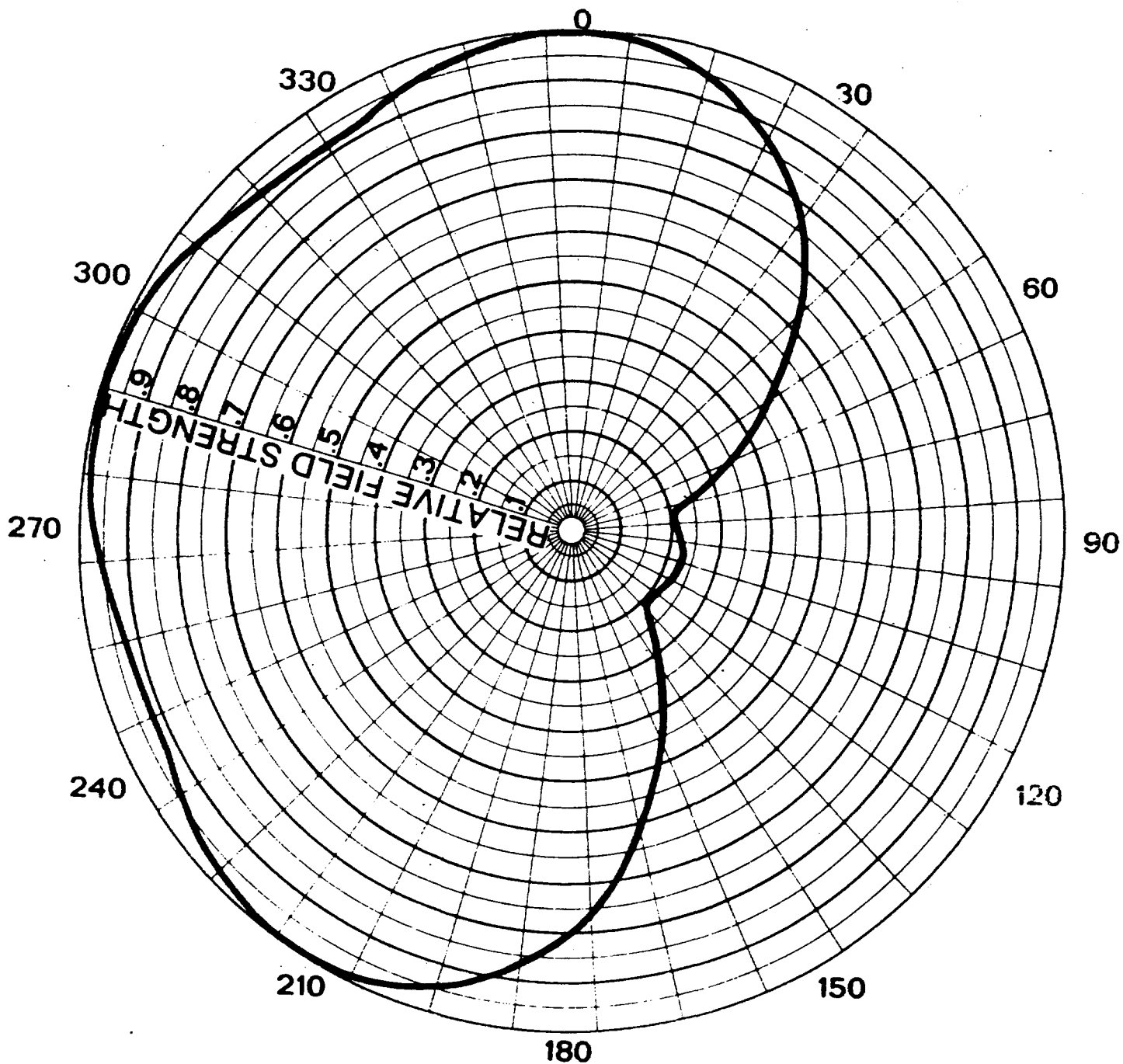
Figure 4

Tabulation of Bogner type B16UA Antenna
Relative Field Strength in the Horizontal Plane
from the Commission's Files

Channel 23

Raystay Company
Lancaster, Pennsylvania

AZIMUTH	TABULATED GAIN	
-----	-----	
0.00	1.000	Main Lobe
10.00	0.970	Oriented at N-286-E
20.00	0.950	
30.00	0.925	
40.00	0.920	
50.00	0.940	
60.00	0.975	
70.00	1.000	
80.00	0.980	
90.00	0.950	
100.00	0.875	
110.00	0.775	
120.00	0.630	
130.00	0.470	
140.00	0.350	
150.00	0.230	
160.00	0.220	
170.00	0.225	
180.00	0.230	
190.00	0.225	
200.00	0.220	
210.00	0.230	
220.00	0.350	
230.00	0.470	
240.00	0.630	
250.00	0.775	
260.00	0.875	
270.00	0.950	
280.00	0.980	
290.00	1.000	
300.00	0.975	
310.00	0.940	
320.00	0.920	
330.00	0.925	
340.00	0.950	
350.00	0.970	

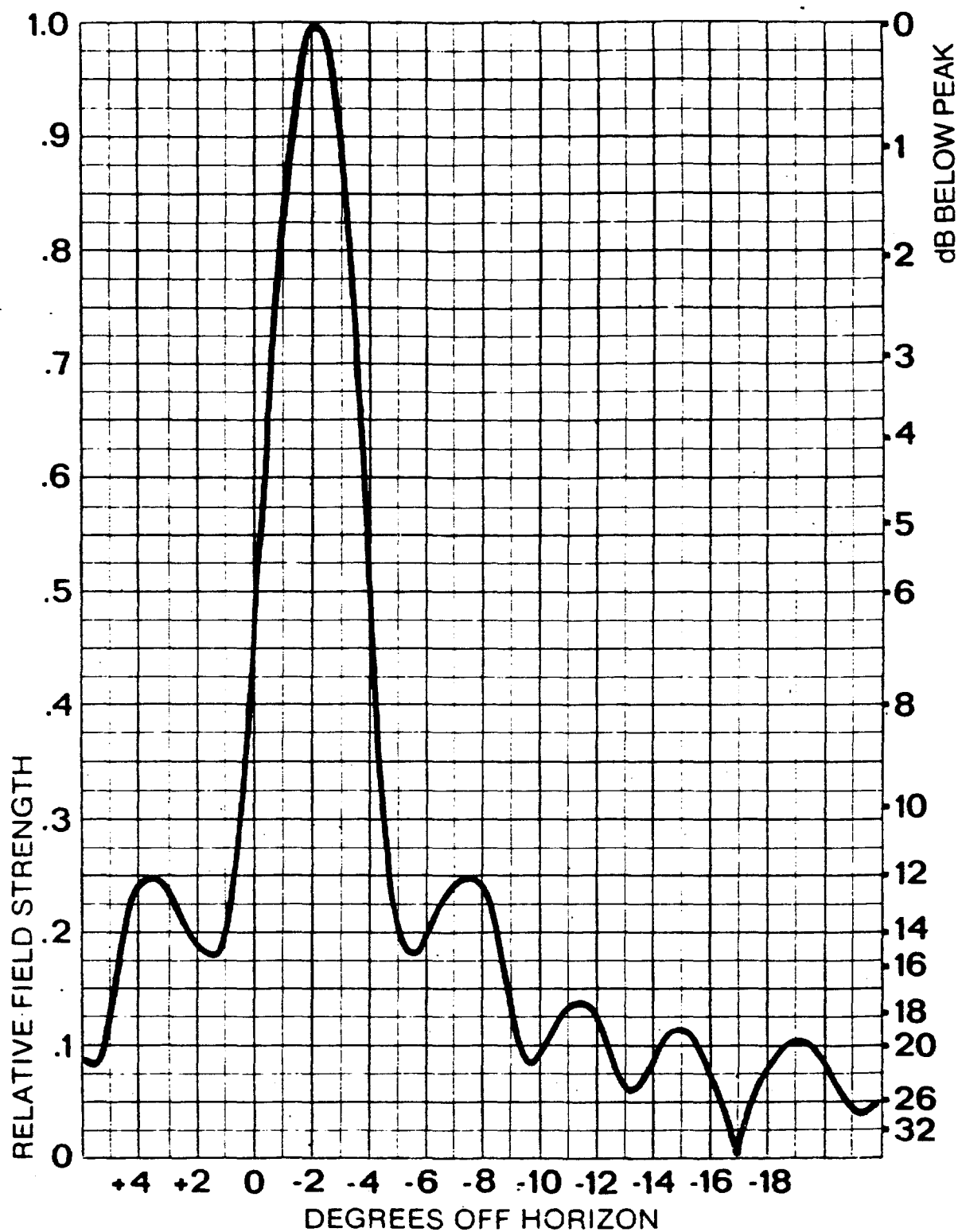


Bogner Broadcast Equipment Corp.
Westbury, N.Y. 11590

Figure 5
Horizontal Plot of
Relative Field from B16UA Ant
Oriented at N-286-E

Channel 23
Raystay Company
Lancaster, Pennsylvania

R. L. HOOVER
CONSULTING
TELECOMMUNICATIONS ENGINEER



Bogner Broadcast Equipment Corp.
Westbury, N.Y. 11590

Figure 6
Vertical Shape Factor
for B16UA Antenna
with -2° Beam Tilt
Channel 23
Raystay Company
Lancaster, Pennsylvania

R. L. HOOVER
CONSULTING
TELECOMMUNICATIONS ENGINEER

ACRODYNE

Acrodyne Industries, Inc.
516 Township Line Road
Blue Bell, Pennsylvania 19422
215/542-7000 800/523-2596
Telex: 846358
FAX: 215/540-5837

April 24, 1989

Mr. Robert Hoover
11704 Seven Locks Road
Potomac, MD 20854

Dear Bob:

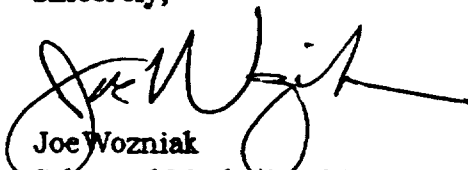
In response to the FAA's concern that you related to us, emissions below 400MHz, as measured at the output of our TLU/1KACT 1kW UHF TV Transmitter, operating on any UHF channel, would be less than the following levels:

108MHz-137MHz....87dB below video carrier
225MHz-400MHz....78dB below video carrier

The performance specifications for this equipment are enclosed for your reference. Of course, to measure for compliance with the FAA's specifications requires special testing which could be performed at the factory or in the field at an additional charge.

If you have any questions, please do not hesitate to call us.

Sincerely,



Joe Wozniak
Sales and Marketing Manager

R. L. HOOVER
CONSULTING TELECOMMUNICATIONS ENGINEER

11704 SEVEN LOCKS ROAD
POTOMAC, MARYLAND 20854

(301) 983-0054

May 15th, 1989

RECEIVED
MAY 17 1989

COHEN & BERFIELD

Federal Aviation Administration
Airway Facilities Division
Communications/Interference Section
Fitzgerald Federal Building, AEA-433
John F. Kennedy International Airport
Jamaica, New York 11430

re: Study 89-AEA-0451-OE
Raystay Company LPTV Application in
Lebanon, Pennsylvania

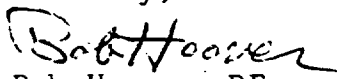
The application before the FCC on behalf of the Raystay Company for a new Low Power Television Station on Channel 38 in Lebanon, Pennsylvania is being reviewed for its electromagnetic compatibility with a nearby FAA facility in Indiantown Gap.

The applicant's proposed operation specifies approximately 23.6 dB of suppression by: 1) Lp, polarization loss of 16 dB because the applicant proposes horizontal (only) polarization from its antenna; 2) Ld, Antenna vertical directivity of approximately 5.6 dB (a -2 degree beam tilt is proposed), where the vertical radiation characteristic or vertical shape factor of the proposed antenna is herewith provided in the attached Figure 6 of the Application before the FCC; and 3) EIRP, Effective Radiation would be reduced by a directional antenna at the azimuthal angle subtended from the proposed LPTV station and the FAA site by approximately 2 dB. Our calculation shows this azimuthal angle to be approximately 313 degrees true, where the proposed LPTV directional antenna would be pointed at 205.3 degrees true, as shown in the attached Figures 4 and 5 of the Application.

The sum of these items results in approximately 23.6 dB spurious signal attenuation, which is in excess of the guideline indicated, 18 dB additional spurious radiation attenuation.

Per the attached letter from the transmitter vendor, an additional 18 dB (a total of 78 dB) is also provided below the video carrier frequency in the 225 to 400 MHz band and an additional 27 dB (a total of 87 dB) is provided in the 108 to 137 MHz band.

Sincerely,


Bob Hoover, PE

Atchmnts: Compatability Request, Fig's 4, 5 & 6 and vendor letter



U.S. Department
of Transportation

**Federal Aviation
Administration**

Eastern Region

Federal Building
John F. Kennedy
International Airport
Jamaica, New York 11430

MAY 9 1989

ELECTROMAGNETIC COMPATIBILITY REQUEST

David A. Gardner
c/o Bob Hoover, P.E.
11704 Seven Locks Road
Potomac, Maryland 20854

Re: Study No. 89-AEA-0451-OE

Dear Sirs:

Your Notice of Proposed Construction or Alteration (FAA form 7460-1) is being reviewed with respect to its electromagnetic compatibility with the surrounding FAA facilities by authority of the Federal Aviation Act of 1958, as amended, Sections 307(a) and 313(a).

Based on an agreement between the FAA and FCC in 1981, your transmitter must not exceed -4 dBm fundamental, and -104 dBm spurious signal level at our site.

Please provide any additional information which supports the compatibility of your transmitter with our criteria, by filling out the enclosed preaddressed form and returning it to this office. The signal levels shown on the attached work sheet were calculated using the frequency and power which you supplied.

Your prompt reply will allow us to expedite your proposal.

Sincerely,

Charles S. Shuler
Manager, Operations, Procedures and Airspace Branch

Enclosures

ELECTROMAGNETIC COMPATIBILITY REQUEST

David A. Gardner
c/o Bob Hoover, P.E.
11704 Seven Locks Road
Potomac, Maryland 20854

Re: Study No. 89-AEA-0451-OE

Please confirm or add the appropriate attenuation for your facility by checking the box(es) at left of item and validate with signature:

- [x] My transmitter provides at least 78 dB of spurious emission attenuation (18 dB greater than the FCC required 60 dB) in the 108-137, 225-400 Mhz frequency bands.

Applicant's proposed transmitter would exceed 78 dB of spurious emission attenuation. However, additional attenuation identified below also provides 23.6 dB attenuation. ----- or -----

- [x] My transmission system can provide the additional 18 dB of attenuation in the 108-137, 225-400 Mhz frequency bands as follows:
(e.g. polarization loss -16 dB, attenuator - 18 dB)

Type of Loss:

Atten:

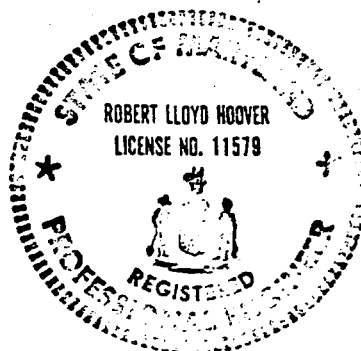
EIRP
Lp, Horz polarization
Ld, Ant vert directivity
Total

2.0	dB
16.0	dB
5.6	dB
23.6	dB

Robert Lloyd Hoover
SIGNATURE OF AUTHORIZING OFFICIAL
Robert Lloyd Hoover, PE

15 May 89
DATE
15 May 89

Registered Professional Engineer,
TITLE
New Jersey #GE28700
Maryland #11579



AIRSPACE NUMBER: 89-AEA-0451-0E

LOCATION: INDIANTOWN GAP, PA

DATE: 24-Apr-89

FAA SITE: RCAG

Lat N 40 26 2
Lon W 76 34 21

Protected frequency 126.2 MHz
Antenna height AMSL 510.0 ft

PROPONENT: GARDNR

Lat N 40 19 49
Lon W 76 25 37

Radiated Power 28.2 Kw
Frequency 615.3 MHz
Antenna height AMSL 628.0 ft

Slant Distance: Da = 55400.9 ft
Theta 0.1 deg

EIRP = Effective Radiated Power of the proponent.

EIRP = $10 \log (\text{power in Kw}) + 62.2$ 76.7 dBm

Lr = Receiver system on frequency losses.
Use 3 dB if actual value unknown.

3.0 dB

La = Typical ground/air antenna loss.
Select VHF or UHF graph from menu.

4.0 dB

Lp = Polarization loss between the victim and
broadcast antennas. If the broadcast
antenna is horizontally polarized, Lp = 16 dB.
for circular polarization, Lp = 0 dB.

0.0 dB

Ld = Antenna vertical directivity. This term
requires antenna pattern data from the
proponent. E = relative E-field at vertical
Theta from above. If unknown, enter E = 1.

$Ld = 10 \log (E)^2$ E = 1 0.0 dB

Sr = FCC spurious emission tolerance. Enter the
lesser: 80 dB for FM, 60 dB for TV, or
 $43 + 10 \log \text{ERP in watts} =$ 87.5

60.0 dB

Lv = Free space transmission loss at the victim
receive frequency.

$Lv = 20 \log (\text{freq. in MHz} \times \text{Da in ft}) - 37$ 99.9 dB

Li = Free space transmission loss at the
frequency of the interfering station.

113.7 dB

IN-BAND RADIATION (must be less than -104 dBm)

EIRP - Lv - Ld - Lp - Lr - Sr =====> -86.2 dBm

OUT-OF-BAND RADIATION (must be less than -4 dBm)

EIRP - Li - Ld - Lp - Lr - La =====> -44.0 dBm

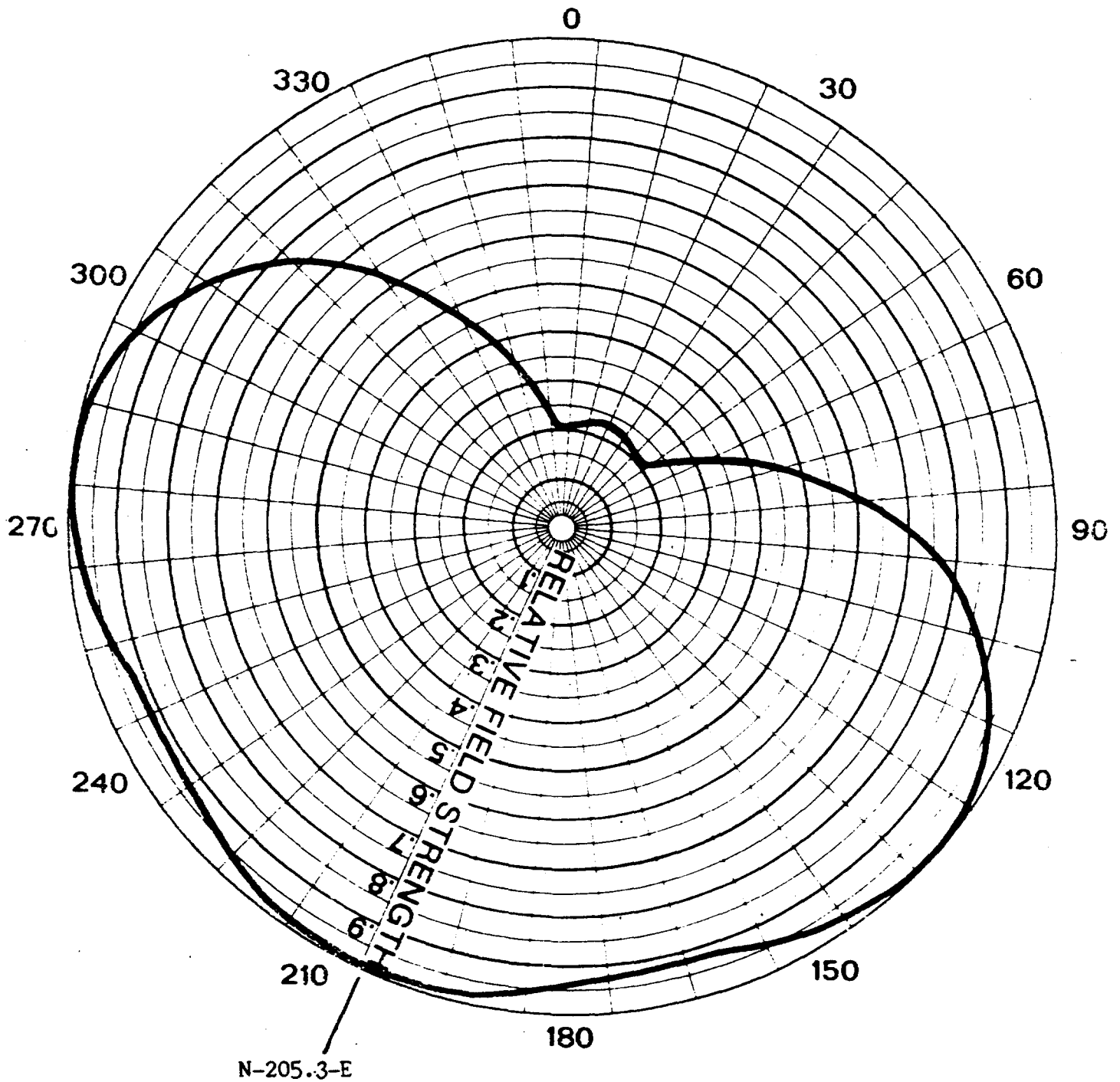
Figure 4

Tabulation of Bogner type B16UA Antenna
Relative Field Strength in the Horizontal Plane
from the Commission's Files

Channel 38

Raystay Company
Lebanon, Pennsylvania

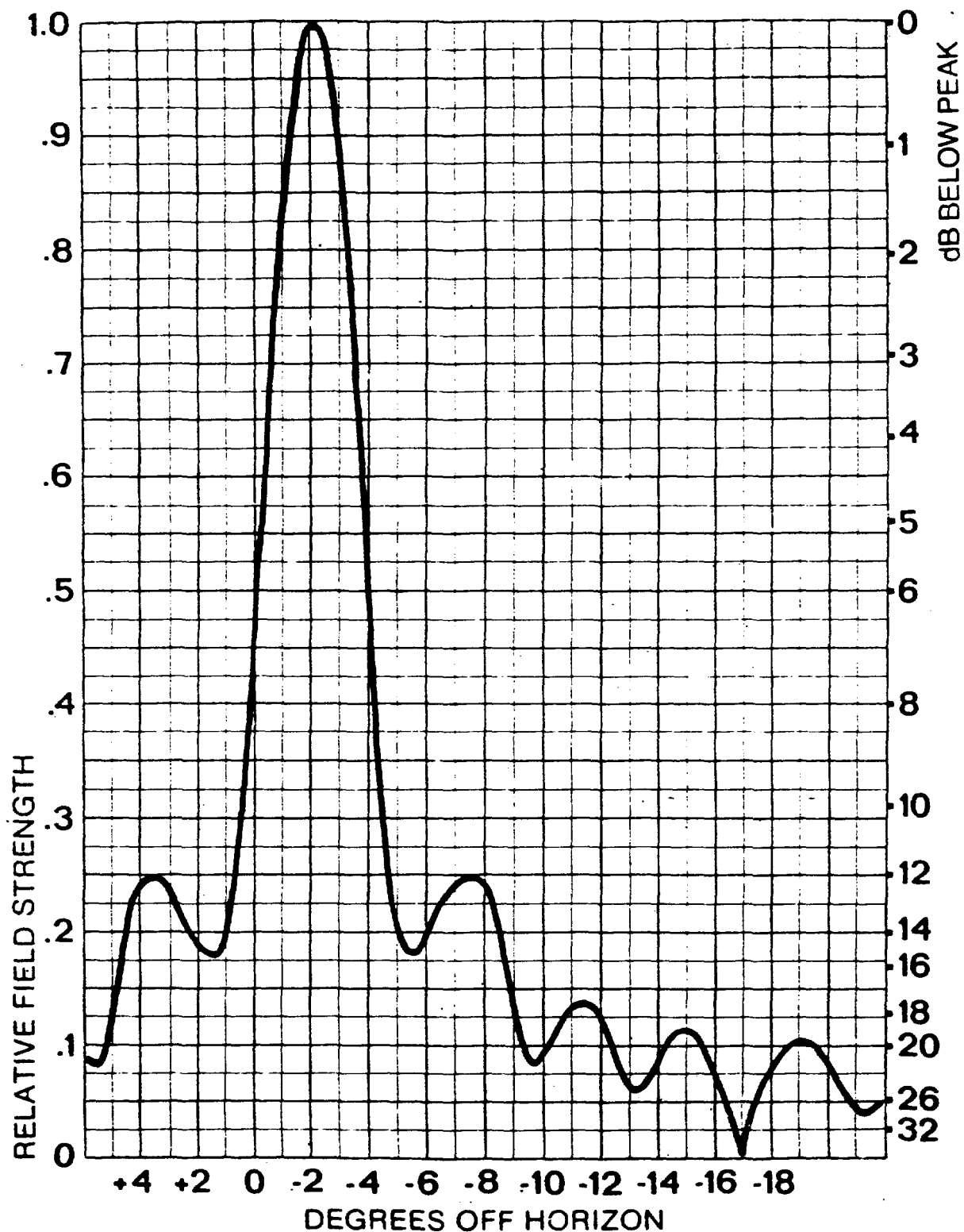
AZIMUTH	TABULATED GAIN	
-----	-----	
0.00	1.000	
10.00	0.970	Antenna w/ its main lobe Oriented at N-205.3-E
20.00	0.950	
30.00	0.925	
40.00	0.920	
50.00	0.940	
60.00	0.975	
70.00	1.000	
80.00	0.980	
90.00	0.950	
100.00	0.875	
110.00	0.775	
120.00	0.630	
130.00	0.470	
140.00	0.350	
150.00	0.230	
160.00	0.220	
170.00	0.225	
180.00	0.230	
190.00	0.225	
200.00	0.220	
210.00	0.230	
220.00	0.350	
230.00	0.470	
240.00	0.630	
250.00	0.775	
260.00	0.875	
270.00	0.950	
280.00	0.980	
290.00	1.000	
300.00	0.975	
310.00	0.940	
320.00	0.920	
330.00	0.925	
340.00	0.950	
350.00	0.970	



Bogner Broadcast Equipment Corp.
Westbury, N.Y. 11590

Figure 5
Horizontal Plot of
Relative Field from B16UA Ant
Oriented at N-205.3-E
Channel 38
Raystay Company
Lebanon, Pennsylvania

R. L. HOOVER
CONSULTING
TELECOMMUNICATIONS ENGINEER



Bogner Broadcast Equipment Corp.
Westbury, N.Y. 11590

Figure 6
Vertical Shape Factor
for B16UA Antenna
with -2° Depression Angle
Channel 38
Raystay Company
Lebanon, Pennsylvania

R. L. HOOVER
CONSULTING
TELECOMMUNICATIONS ENGINEER

ACRODYNE

Acrodyne Industries, Inc.
516 Township Line Road
Blue Bell, Pennsylvania 19422
215/542-7000 800/523-2596
Telex: 846358
FAX: 215/540-5837

April 24, 1989

Mr. Robert Hoover
11704 Seven Locks Road
Potomac, MD 20854

Dear Bob:

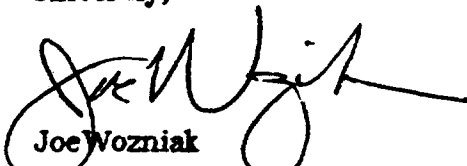
In response to the FAA's concern that you related to us, emissions below 400MHz, as measured at the output of our TLU/1KACT 1kW UHF TV Transmitter, operating on any UHF channel, would be less than the following levels:

108MHz-137MHz....87dB below video carrier
225MHz-400MHz....78dB below video carrier

The performance specifications for this equipment are enclosed for your reference. Of course, to measure for compliance with the FAA's specifications requires special testing which could be performed at the factory or in the field at an additional charge.

If you have any questions, please do not hesitate to call us.

Sincerely,



Joe Wozniak
Sales and Marketing Manager

MR. R. L. HOOVER, P.E.

R. L. HOOVER
CONSULTING TELECOMMUNICATIONS ENGINEER
11704 SEVEN LOCKS ROAD
POTOMAC, MARYLAND 20854
(301) 983-0054

R-6-15
RECEIVED
JUL 3 1989

June 30th, 1989

COHEN & BERFIELD

Mr. David Gardner
Raystay Company

Dear David:



The Long Island FAA Office also approved your Lancaster proposed construction. As for Red Lion, please complete and return the attached form when you begin construction and again when you finish.

Sincerely,



Bob Hoover, PE

Copy to Mort Berfield, Esquire

 U.S. Department of Transportation Federal Aviation Administration		NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION		Aeronautical Study Number 87 AEA-0452-DE										
1. Nature of Proposal A. Type <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Alteration B. Class <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary (Duration _____ months) C. Work Schedule Dates Beginning <u>After FCC Aprvl</u> End <u>4 mo's</u>			2. Complete Description of Structure A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure. B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports. C. Include information showing site orientation, dimensions, and construction materials of the proposed structure. Propose to top mount two Low Power TV antennas on a self supporting pedestal on roof of bldg. Overall ht 187 ft agl, 527 ft amsl. Bldg roof ht msd w/ surveyor's cord. See Fig #1. Proposed Low Power TV sta's would operate on 525.25 MHz w/ 28.47 kW visual ERP & on 573.25 MHz w/ 26.4 kW Visual ERP. (if more space is required, continue on a separate sheet.)											
3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. (Number, Street, City, State and Zip Code) (717) <u>243 - 4918</u> area code Telephone Number <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Mr. David A. Gardner Raystay Company P.O. Box 38 Carlisle, Pennsylvania 17013 </div>			3B. Name, address and telephone number of proponent's representative if different than 3 above. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Bob Hoover, PE 11704 Seven Locks Road Potomac, Maryland 20854 (301) 983 - 0054 </div>											
4. Location of Structure <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">A. Coordinates (To nearest second)</td> <td style="width: 25%;">B. Nearest City or Town, and State</td> <td style="width: 25%;">C. Name of nearest airport, heliport, flight park, or seaplane base</td> </tr> <tr> <td>40° 03' 47" Latitude</td> <td>Lancaster, PA</td> <td>Habecker</td> </tr> <tr> <td>76° 19' 09" Longitude</td> <td>(1) Distance to 4B - Miles</td> <td>(1) Distance from structure to nearest point of nearest runway 2 mi</td> </tr> <tr> <td></td> <td>(2) Direction to 4B -</td> <td>(2) Direction from structure to airport N-270-R</td> </tr> </table>						A. Coordinates (To nearest second)	B. Nearest City or Town, and State	C. Name of nearest airport, heliport, flight park, or seaplane base	40° 03' 47" Latitude	Lancaster, PA	Habecker	76° 19' 09" Longitude	(1) Distance to 4B - Miles	(1) Distance from structure to nearest point of nearest runway 2 mi
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	(2) Direction to 4B -	(2) Direction from structure to airport N-270-R												
5. Height and Elevation (Complete to the nearest foot) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">A. Elevation of site above mean sea level</td> <td style="width: 40%;">340 ft</td> </tr> <tr> <td>B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated</td> <td>187 ft</td> </tr> <tr> <td>C. Overall height above mean sea level (A + B)</td> <td>527 ft</td> </tr> </table>						A. Elevation of site above mean sea level	340 ft	B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated	187 ft	C. Overall height above mean sea level (A + B)	527 ft			
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D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures, etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s). (if more space is required, continue on a separate sheet of paper and attach to this notice.) See Figure #2, a 7½-min Quadrangle Map for the area and Figure #3, a Tactical Pilotage Chart for the area. Erick Rd, Lancaster, Pennsylvania.														
Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than \$500 for the first offense and not more than \$2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).														
I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.														
Date Mar 3rd, 89		Typed Name/Title of Person Filing Notice Robert Lloyd Hoover, PE		Signature 										

DR. R. L. HOOVER, P.E.

R. L. HOOVER
CONSULTING TELECOMMUNICATIONS ENGINEER
11704 SEVEN LOCKS ROAD
POTOMAC, MARYLAND 20854
(301) 983-0054

R-6-15
RECEIVED
AUG 9 1989

August 8th, 1989

COHEN & BERFIELD

BY FEDERAL EXPRESS

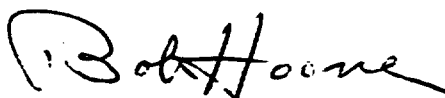
Atten: Mr. John Hepson
Federal Aviation Administration
Airways Facilities Div, Comm/Intef Section
Fitzgerald Federal Bldg, AEA-435
John F. Kennedy International Airport
Jamaica, New York 11430

re: Study 89-AEA-0451-OE
Raystay Company LPTV Application
Lebanon, Pennsylvania

Dear Mr. Hepson:

This morning I received a call from Mr. Amour Brown in your office stating that our response to an Electromagnetic Compatibility Request had not been received. We are sending a copy of this response dated May 15th and mailed by First Class Mail.

Sincerely,



Bob Hoover, PE

Copy w/ May 15th response to Amour W. Brown, AEA-530

Blind copy to: Dave Gardner
Mort Berfield, Esquire

DR. R. L. HOOVER, P.E.

R. L. HOOVER
CONSULTING TELECOMMUNICATIONS ENGINEER
11704 SEVEN LOCKS ROAD
POTOMAC, MARYLAND 20854
(301) 983-0054

R-6-1F
RECEIVED
AUG 22 1989

August 18th, 1989 COHEN & BERFIELD


Mr. David Gardner
Raystay Company

Dear David:

The Long Island Office sent its approval for the Lebanon proposed LPTV construction after sending a copy of the May material on spurious jamming by Federal Express to them. Evidently, they lost the original response.

The form to be returned when you begin construction and again when you finish is also attached.

Sincerely,



Bob Hoover, PE

Copy to Mort Berfield, Esquire /

MAR 16 1989

Form Approved OMB No. 2120-0001

DO NOT REMOVE CARBONS

U.S. Department of Transportation Federal Aviation Administration			NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION		Aeronautical Study Number 89-AEA-0451-0E	
1. Nature of Proposal				2. Complete Description of Structure		
A. Type <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Alteration		B. Class <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary (Duration _____ months)		C. Work Schedule Dates Beginning <u>After FCC Aprvl</u> End <u>4 mo's</u>		
3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. (Number, Street, City, State and Zip Code) (717) 243 - 4918 area code Telephone Number Mr. David A. Gardner Raystay Company P.O. Box 38 Carlisle, Pennsylvania 17013				A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure. B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports. C. Include information showing site orientation, dimensions, and construction materials of the proposed structure. Propose to top mount two Low Power TV antennas on a self supporting pedestal on roof of bldg. Overall ht 158 ft agl, 628 ft amsl. See Fig #1. Bldg roof ht msd w/ surveyor's cord. Proposed Low Power TV sta's would operate on 615.25 MHz w/ 28.16 kW visual ERP & on 717.25 MHz w/ 26.56 kW Visual ERP. Please refer to Figure 1. (if more space is required, continue on a separate sheet.)		
B. Name, address and telephone number of proponent's representative if different than 3 above. Bob Hoover, PE 11704 Seven Locks Road Potomac, Maryland 20854 (301) 983 - 0054						
4. Location of Structure				5. Height and Elevation (Complete to the nearest foot)		
A. Coordinates (To nearest second) 40° 19' 49" Latitude 76° 25' 37" Longitude		B. Nearest City or Town, and State Lebanon, PA		C. Name of nearest airport, heliport, flightpark, or seaplane base Millard A/P & Keller Bros A/P 4.5 nmi to Keller & Millard N-118-E to Keller Bros N-258-E to Millard		A. Elevation of site above mean sea level 470 ft
		(1) Distance to 4B Miles		(1) Distance from structure to nearest point of nearest runway		B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated 158 ft
		(2) Direction to 4B		(2) Direction from structure to airport		C. Overall height above mean sea level (A + B) 628 ft
D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures, etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s). (if more space is required, continue on a separate sheet of paper and attach to this notice.) See Figure #2, a 7½-min Quadrangle Map for the area and Figure #3, a Tactical Pilotage Chart for the area. 625 Quentin Rd, Lebanon, Pennsylvania.						
Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than \$500 for the first offense and not more than \$2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).						
I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.						
Date Feb 24th, 89		Typed Name/Title of Person Filing Notice Robert Lloyd Hoover, PE			Signature <i>Robert Lloyd Hoover</i>	
FOR FAA USE ONLY: This form is to be used by the FAA to determine if a structure is a hazard to navigation. If a structure is a hazard to navigation, the FAA will either require the structure to be removed or to be lighted and marked. The FAA will also require the structure to be lighted and marked if it is a hazard to navigation. The FAA will also require the structure to be lighted and marked if it is a hazard to navigation.						